Claims:

1. (Currently Amended) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compound is defined by the formula X

$$(X) \qquad R^{1} \xrightarrow{R^{1}} C \xrightarrow{R^{3}} C \xrightarrow{R^{4}} R^{6} - A$$

where each R¹ is independently hydrogen or a hydrocarbyl group, R² is hydrogen or a hydrocarbyl group, R³ is hydrogen or a hydrocarbyl group, each R⁴ is independently hydrogen or a monovalent organic group, R⁶ is a covalent bond or a hydrocarbylene group, and A is a functional group.

2. (Original) An anionic polymerization initiator defined according to the formula I:

(I)
$$R^{1}$$
 R^{1}
 R^{1}
 R^{1}
 R^{1}
 R^{2}
 R^{2}
 R^{5}
 R^{4}
 R^{6}
 R^{6}

where each R^1 is independently hydrogen or a hydrocarbyl group, R^2 is hydrogen or a hydrocarbyl group, R^3 is hydrogen or a hydrocarbyl group, each R^4 is independently

hydrogen or a monovalent organic group, R^5 is a <u>hydrogen atom or a hydrocarbyl</u> group, where at least one of R^3 or R^5 is hydrocarbyl, R^6 is a covalent bond or a hydrocarbylene group, and A is a functional group.

3. (Currently Amended) A polymer prepared by a process of comprising the steps of:

polymerizing monomer with an initiator that is prepared by combining a
functionalized styryl compound and an organolithium compound, where the
functionalized styryl compound is defined by the formula X

(X)
$$R^{1}$$
 R^{1}
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 R^{6}
 R^{6}
 R^{1}
 R^{1}
 R^{1}

where each R¹ is independently hydrogen or a hydrocarbyl group, R² is hydrogen or a hydrocarbyl group, R³ is hydrogen or a hydrocarbyl group, each R⁴ is independently hydrogen or a monovalent organic group, R⁶ is a covalent bond or a hydrocarbylene group, and A is a functional group.

4. (cancelled)

5. (Currently Amended) The process of claim 1, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4-dimethylpyrrolidine, -3,3-dimethylpyrrolidine, -yiperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethyl-piperazine, -4-propylpiperazine, -hexamethyleneimine (or --perhydroazepine), -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene,

-trimethylazabicycloöctane, [[or]] -perhydroisoquinoline, or -perhydroindole.

- 6. (Currently Amended) The process of claim 1, where said step of combining combines about 0.8 mmol of the eyelic-amino functionalized styryl compound with about 1.0 mmol of the organolithium compound.
- 7. (Previously presented) The process of claim 1, where step of combining occurs in the presence of about 1 to about 20 mmol of monomer in order to chain extend the initiator.
- 8. (Currently Amended) The process of claim 1, where the cylic amine compound functional group A is defined by the formula III

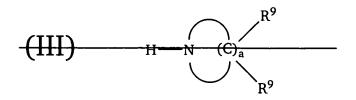
where each R^9 is independently hydrogen or a monovalent organic group and a is an integer from 4 to about 18.

9. (Previously Presented) The process of claim 1, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized nucleophile.

10. (Currently Amended) The process of claim 1, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized eletrophile electrophile.

11. (Cancelled)

- 12. (Currently Amended) The polymer of claim 3, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4dimethylpyrrolidiene, -3,3-dimethylpyrrolidine, -piperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethyl-piperazine, -4-propylpiperazine, -hexamethyleneimine (or ---perhydroazepine), -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene, -trimethylazabicycloöctane, [[or]] -perhydroisoguinoline, or -perhydroindole.
- 13. (Currently Amended) The polymer of claim 3, where said step of combining combines about 0.8 mmol of the eyelic-amino functionalized styryl compound with about 1.0 mmol of the organolithium compound.
- 14. (Previously Presented) The polymer of claim 3, where step of combining occurs in the presence of about 1 to about 20 mmol of monomer in order to chain extend the initiator.
- 15. (Currently Amended) The polymer of claim 3, where the eylic amine compound functional group A is defined by the formula III



where each R⁹ is independently hydrogen or a monovalent organic group and a is an integer from 4 to about 18.

- 16. (Previously Presented) The polymer of claim 3, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized nucleophile.
- 17. (Currently Amended) The polymer of claim 3, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized electrophile electrophile.
- 18. (New) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compounds includes a functional group selected from the group consisting of an amine group, a phosphine group, an ether group, a thio ether group, a seleno group, a silyl group, an alkyl tin group, and a short-chain thermoplastic polymer segment.

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- 19. (New) The process of claim 19, where the functional group is selected from the group consisting of an amine group, a phosphine group, an ether group, a thio ether group, a seleno group, a silyl group, and an alkyl tin group.
- 20. (New) The process of claim 19, where the functional group is selected from the group consisting of an amine group, a phosphine group, a silyl group, and an alkyl tin group.
- 21. (New) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4-dimethylpyrrolidiene, -3,3-dimethylpyrrolidine, -piperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethyl-piperazine, -4-propylpiperazine, -hexamethyleneimine, -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene, -trimethylazabicycloöctane, -perhydroisoquinoline, or -perhydroindole.